

What is claimed is,

1. A container inspection method for inspecting quality of a finally shaped sealed container obtained by forming a web-like packaging laminated material having predetermined folding lines in tube shape, lapping both ends of the packaging material to form an overlap, longitudinally sealing the packaging material in the longitudinal direction to form an longitudinal seal zone on the overlap, filling food into the tube-shaped packaging material, pressing the packaging material at every predetermined interval in the crossing direction to seal the packaging material by the transversal seal to form a transversal seal zone, cutting at the middle of the transversal seal zone to obtain a pillow-like preliminary forming, and sealing flaps formed by folding along the folding lines to the container side wall and/or a container bottom face, comprising:

rotating the flaps sealed to the container wall around a ridge side where the flaps integrally communicate with the container wall to peel the flaps from the container wall;

returning to a shape of the pillow-like preliminary forming;

cutting the container wall and squeezing out the filled food to prepare a sampled body;

measuring electrostatic capacity and loss factor on said seal zone of the sampled body to inspect seal quality;

measuring an overlap width on the seal inspected sampled body and unevenness on the external surface of the transversal seal zone edge on the inside of the container by an image processing unit to inspect the overlap width and the unevenness by image processing;

arranging a first electrode at a distance from said seal zone of the sampled body;

arranging a second electrode so as to contact said sampled body; and  
inspecting damage on the seal zone based on feedback current flowing on the second electrode.

2. The container inspection method according to Claim 1, comprising, processing inspection results of said seal quality inspection, inspection by image processing and inspection for damage on seal zone, storing as well as outputting.

3. A container inspection device for inspecting a finally shaped sealed container obtained by forming a web-like packaging laminated material having predetermined folding lines in tube shape, lapping both ends of the packaging material to form an overlap, longitudinally sealing the packaging material in the longitudinal direction to form an longitudinal seal zone on the overlap, filling food into the tube-shaped packaging material, pressing the packaging material at every predetermined interval in the crossing direction to seal the packaging material by the transversal seal to form a transversal seal zone, cutting at the middle of the transversal seal zone to obtain a pillow-like preliminary forming, and sealing flaps formed by folding along the folding lines to the container side wall and/or a container bottom face, comprising:

a pre-processing unit for rotating the flaps sealed to the container wall around a ridge side where the flaps integrally communicate with the container wall to peel the flaps from the container wall, and for returning to a shape of the pillow-like preliminary forming;

a sampled body preparing unit for cutting the container wall to protrude the filled food to prepare the sampled body;

a seal quality unit for measuring electrostatic capacity and loss factor on said seal zone of the sampled body to inspect seal quality;

a image processing unit for measuring an overlap width on the seal inspected sampled body and unevenness on the external surface of the transversal seal zone edge on the inside of the container to inspect the overlap width and the unevenness by image processing;

a seal damage inspection unit for arranging a first electrode at a distance from said seal zone of the sampled body, arranging a second electrode so as to contact said sampled body, and inspecting damage on the seal zone based on feedback current flowing on the second electrode.

4. The container inspection device according to Claim 3, comprising a control sorting unit for controlling said seal quality unit, image processing unit and seal damage inspection unit, receiving judging result according to command signal and sorting said sampled body according to acceptability of the judging result.